

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) An intraocular lens system for implantation in the eye to modify the lens system of the eye comprising the cornea and the natural or existing artificial lens in the eye, comprising:

a first lens having a high minus portion adapted to supplement the natural or existing artificial lens and be implanted in the eye; and

a second lens adapted to be implanted into the eye in series with and anterior to said first lens and used in combination with said first lens to create a lens system that functions as a teledioptic lens system which, when used without an external lens, provides unmagnified and peripherally unrestricted vision and which, when used with an external lens, provides magnified and peripherally restricted vision to correct for macular degeneration.

2. (previously presented) An intraocular lens system as claimed in claim 1, further comprising:

at least one fastening member, adapted to secure the first lens to an interior portion of the eye.

3. (original) An intraocular lens system as claimed in claim 2, wherein:
the fastening member includes a haptic.

4. (previously presented) An intraocular lens system as claimed in claim 2, wherein:
the fastening member is adapted to secure the first lens to the iris of the eye.

5. (previously presented) An intraocular lens system as claimed in claim 4, wherein:
the fastening member is adapted to secure the first lens to the iris of the eye, such that the first lens aligns with the pupil of the eye.

6. (previously presented) An intraocular lens system as claimed in claim 4, wherein:
the fastening member is adapted to secure the first lens to the iris of the eye, such that the lens is present in a portion of the iris that has been removed by iridectomy.
7. (withdrawn) An intraocular lens system as claimed in claim 2, wherein:
the fastening member is adapted to secure the first lens in front of the surface of the natural or existing artificial lens in the eye.
8. (withdrawn) An intraocular lens system as claimed in claim 1, wherein:
the first lens is adapted to be implanted in the cornea of the eye.
9. (previously presented) An intraocular lens system as claimed in claim 1, wherein:
the first lens includes a plus portion substantially surrounded by the high minus portion.
10. (previously presented) An intraocular lens system as claimed in claim 1, wherein:
the first lens includes a minus outer portion substantially surrounding the high minus portion.
11. (previously presented) An intraocular lens system as claimed in claim 1, wherein:
the first lens includes a plus outer portion substantially surrounding the high minus portion.
12. (previously presented) An intraocular lens system as claimed in claim 1, wherein:
the first lens includes a toric outer portion substantially surrounding the high minus portion.
13. (previously presented) An intraocular lens system as claimed in claim 1, wherein:
the first lens, when used with the external lens, provides a Galilean telescopic lens system.

14. (currently amended) A method for modifying the lens system of the eye comprising the cornea and the natural or existing artificial lens in the eye, the method comprising:
 - implanting in the eye a first lens having a high minus portion; and
 - implanting in the eye a second lens in series with and anterior to said first lens to create a lens system that supplements the natural or existing artificial lens and functions as a teledioptic lens system which, when used without an external lens, provides unmagnified and peripherally unrestricted vision and which, when used with an external lens, provides magnified and peripherally restricted vision to correct for macular degeneration.
15. (previously presented) A method as claimed in claim 14, further comprising:
 - using at least one fastening member to secure the first lens to an interior portion of the eye.
16. (original) A method as claimed in claim 15, wherein:
 - the fastening member includes a haptic.
17. (previously presented) A method as claimed in claim 15, wherein:
 - the using step uses the fastening member to secure the first lens to the iris of the eye.
18. (previously presented) A method as claimed in claim 17, wherein:
 - the using step uses the fastening member to secure the first lens to the iris of the eye, such that the first lens aligns with the pupil of the eye.
19. (previously presented) A method as claimed in claim 17, wherein:
 - the using step uses the fastening member to secure the first lens to the iris of the eye, such that the first lens is present in a portion of the iris that has been removed by iridectomy.
20. (withdrawn) A method as claimed in claim 15, wherein:

the using step uses the fastening member to secure the first lens in front of the surface of the natural or existing artificial lens in the eye.

21. (withdrawn) A method as claimed in claim 14, wherein:
implanting step implants the first lens in the cornea of the eye.
22. (previously presented) A method as claimed in claim 14, wherein:
the first lens includes a plus portion substantially surrounded by the high minus portion.
23. (previously presented) A method as claimed in claim 14, wherein:
the first lens includes a minus outer portion substantially surrounding the high minus portion.
24. (previously presented) A method as claimed in claim 14, wherein:
the first lens includes a plus outer portion substantially surrounding the high minus portion.
25. (previously presented) A method as claimed in claim 14, wherein:
the first lens includes a toric outer portion substantially surrounding the high minus portion.
26. (previously presented) A method as claimed in claim 14, wherein:
the first lens, when used with the external lens, provides a Galilean telescopic lens system.

27. (currently amended) An intraocular lens system for implantation in the eye to modify the lens system of the eye comprising the cornea and the natural or existing artificial lens in the eye, comprising:

a first lens having a high minus portion and an outer portion substantially surrounding the high minus portion and being formed as a plus, minus, or toric lens, adapted to be implanted in the eye in a predetermined position relative to the natural lens or an existing artificial lens;

a second lens adapted to be implanted into the eye anterior to the first lens and used in combination with said first lens to create a lens system that functions as a teledioptic lens system which, when used without an external lens, provides unmagnified and peripherally unrestricted vision and which, when used with an external lens, provides magnified and peripherally restricted vision to correct for macular degeneration.

28. (currently amended) A method for modifying the lens system of the eye comprising the cornea and the natural or existing artificial lens in the eye, the method comprising:

implanting in the eye a first lens having a high minus portion and an outer portion substantially surrounding the high minus portion and being formed as a plus, minus or toric lens in a predetermined position relative to the natural or existing artificial lens in the eye,

implanting in the eye a second lens in series with and anterior to said first lens to create a lens system that functions as a teledioptic lens system which, when used without an external lens, provides unmagnified and peripherally unrestricted vision and which, when used with an external lens, provides magnified and peripherally restricted vision to correct for macular degeneration.

29. (currently amended) A lens system for correcting vision in the eye, comprising:

a first lens having a high minus portion and a second portion that is formed as a plus, minus or toric lens, said first lens adapted to be inserted into the eye; and

a second lens adapted to be inserted into the eye in series with and anterior to said first lens such that the first and second lenses form a teledioptic lens system.

30. (previously presented) An intraocular lens system according to claim 29, wherein:
said high minus portion is substantially surrounded by said second portion, and said first lens is adapted to be inserted into the anterior chamber of the eye.
31. (previously presented) An intraocular lens system according to claim 30, wherein:
said second lens is a plus lens and at least a portion of said second lens is adapted to be inserted between layers of the cornea.
32. (withdrawn) An intraocular lens system according to claim 29, wherein:
said high minus portion is substantially surrounded by said second portion, and said first lens is adapted to be inserted into the posterior chamber of the eye.
33. (withdrawn) An intraocular lens system according to claim 32, wherein:
said second lens is a plus lens and said second lens is adapted to be inserted into the anterior chamber of the eye.
34. (previously presented) An intraocular lens system as claimed in claim 1, further comprising:
said second lens is adapted to be inserted into the cornea of the eye, such that the first and second lenses form a teledioptic lens system.
35. (currently amended) A method as claimed in claim 14, wherein
said step of implanting ~~a~~the second lens into the eye includes implanting said second lens into the cornea of the eye, such that the first and second lenses form a teledioptic lens system.

36. (currently amended) An intraocular lens system, comprising:
 - a first optical element adapted to be implanted in the eye and having a first portion and a second portion,
 - said first portion including a diverging lens, and
 - said second portion including a converging lens, said converging and diverging lenses being offset from each other in a direction perpendicular to the optical axis of the eye; and
 - a second optical element adapted to be implanted in the eye and positioned anterior to the first optical element and in series with said second portion and including a converging lens;
 - wherein use of said intraocular lens system in combination with a converging spectacle lens will provide a magnified first image from the central field of vision, while use of said intraocular lens without the converging spectacle lens will provide a second image from the peripheral field of vision.
37. (withdrawn) An intraocular lens system according to claim 36, wherein said first portion and said second portion are integrally formed.
38. (withdrawn) An intraocular lens system according to claim 36, wherein said second portion substantially surrounds said first portion.
39. (withdrawn) An intraocular lens system according to claim 36, wherein said first optical element is configured to replace the natural lens.
40. (withdrawn) An intraocular lens system according to claim 36, wherein said first optical element is configured to supplement the natural lens.

41. (currently amended) An optical system, comprising:
 - an optical element adapted to be implanted in the eye and having a first portion and a second portion,
 - said first portion including a diverging lens, and
 - said second portion including a first converging lens, said first converging lens and said diverging lens being offset from each other in a direction perpendicular to the optical axis of the eye;
 - a second converging lens capable of being implanted at least partially in the cornea, and in series with and anterior to said diverging lens;
 - wherein the combination of said second converging lens and said diverging lens provide the patient with a magnified first image from the central field of vision and said first converging lens provides a second image from the peripheral field of vision.
42. (withdrawn) An optical system according to claim 41, wherein
said optical element and second converging lens are configured such that use of said optical system in combination with a converging spectacle lens will provide said magnified first image, while use of said optical system without the converging spectacle lens will provide a substantially unmagnified second image from the peripheral field of vision.
43. (withdrawn) An optical system according to claim 41, wherein
said first portion and said second portion are integrally formed.
44. (withdrawn) An optical system according to claim 41, wherein
said second portion substantially surrounds said first portion.

45. (currently amended) An optical system, comprising:
- a first optical element adapted to be implanted in the eye and having a first portion and a second portion,
 - said first portion including a diverging lens, and
 - said second portion including a converging lens, said converging and diverging lenses being offset from each other in a direction perpendicular to the optical axis of the eye; and
 - a second optical element adapted to be implanted in the eye anterior to the first optical element and in series with said second portion and including a converging lens;
 - wherein said first portion in combination with said second optical element provide a magnified first image from the central field of vision, and said second portion will provide a second image from the peripheral field of vision.
46. (withdrawn) An optical system according to claim 45, wherein
- said first optical element and said second optical elements are configured such that use of said intraocular lens system in combination with a converging spectacle lens will provide said magnified first image, while use of said optical system without the converging spectacle lens will provide a substantially unmagnified second image from the peripheral field of vision.
47. (withdrawn) An optical system according to claim 45, wherein
- said first optical element is configured to replace the natural lens.
48. (withdrawn) An optical system according to claim 45, wherein
- said first optical element is configured to supplement the natural lens.
49. (withdrawn) An optical system according to claim 45, wherein
- said second portion substantially surrounds said first portion.
50. (new) The intraocular lens system of Claim 1, wherein a natural fluid of the eye can flow between the first lens and the second lens.

51. (new) The lens system of Claim 29, wherein a natural fluid of the eye can flow between the first lens and the second lens.

52. (new) The optical system of Claim 45, wherein a natural fluid of the eye can flow between the first optical element and the second optical.